# The Physiology and Pathophysiology of the Skin

Volume 2 edited by A. Jarrett

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Volume 2
The Nerves and Blood Vessels

Edited by

A. JARRETT

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#### **VOLUME 1** The Epidermis

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#### **VOLUME 2** The Nerves and Blood Vessels

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#### **Preface**

No better introduction to any work on the physiology of the skin could be written than that already given by Billingham and Silvers in 'Biology of Skin and Hair Growth'. Their comments are quoted verbatim:

In any rapidly advancing subject, with a voluminous literature and numerous international conferences in its wake, newcomers not infrequently gain the erroneous impression that most of the important general principles have already been pretty well mapped out and little that is fundamentally new or exciting remains to be discovered. The purpose of this opening address is to make it clear that this certainly does not apply to the biology of skin where numerous empirical and other observations await elucidation; many conflicting or alternative hypotheses await experimental discrimination: and not a few deeply rooted beliefs and generalizations are urgently in need of critical re-evaluation.

This work has been written in an attempt to give a reasonably complete presentation of current views and knowledge. The authors have actively participated in research in their particular sections and have an understanding of the views of other colleagues in their field. It is therefore hoped that these volumes will give, as far as possible, an unbiased account of the varying views on different aspects of skin physiology. Research on normal and abnormal skin physiology has increased greatly during the past two decades, and this has resulted in the publication of an ever increasing number of papers and monographs. Some dermatologists may have had difficulty in keeping in touch with this mass of information, and perhaps the chief reason for undertaking this work is to bring together contemporary knowledge and thinking in a form that the practising dermatologist can relate to some of his clinical problems. However, the work is in no way intended as a text book of clinical dermatology, and not all the information in it can be directly related to patients.

It is also hoped that it will be of value to pathologists who wish to understand something of the disordered physiology underlying the cutaneous disorders which they may be called upon to diagnose histologically. In addition, it should be of use to biologists and other scientists interested in the skin and its problems.

The first volume deals with the epidermis and the second with the nerves of the skin and the cutaneous blood vessels. Each section is complete in itself, but Volume 1 contains a certain amount of basic information concerning the nature and function of cell organelles, and gives an account of cell biochemistry in general terms. It is therefore suggested that those readers with less biological orientation should perhaps read Volume 1 first.

A. JARRETT

JANUARY 1973

#### Acknowledgements

In a work of this nature it is inevitable that the authors have become indebted to a great number of their fellow workers who have willingly agreed to discuss their work and permit the use of illustrations. Some of these have not been previously published, and it is indeed a very happy situation in this materialistic world that research workers are prepared to co-operate and help on such unselfish terms. We sincerely trust that all appropriate credit has been given in the legends of the particular illustrations.

It is with great regret that we have to record the death of Mr John Cruise of Academic Press while this book was in preparation. He had been of great help in formulating this work and his loss is deeply felt by the Editor. Mrs Jane Duncan also of Academic Press, has coped with the vicissitudes of the book ably and without complaint, for which we are all very grateful.

We would like to thank the Editor's secretary, Mrs M. Henchoz, for re-typing portions of the typescript and for her help in arranging the illustrations and the index.

A. JARRETT D. C. SINCLAIR T. J. RYAN JANUARY 1973

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